

## Staff Summary Report



Council Meeting Date: 07/22/08

Agenda Item Number: 66

**SUBJECT:** Request approval of a professional services contract with Greeley and Hansen to evaluate and provide recommendations for improvement to operations and design issues identified by the staff at the Kyrene Water Reclamation Plant.

**DOCUMENT NAME:** 20080722PWDR21 **KYRENE WATER RECLAMATION PLANT (0812-02) PROJECT NO. 32-997044**

**SUPPORTING DOCS:** Yes.

**COMMENTS:** Total cost for this contract shall not exceed \$64,571.00.

**PREPARED BY:** Donna Rygiel, Engineering Contract Administrator (x8520)

**REVIEWED BY:** Andy Goh, Deputy PW Manager/City Engineer (x8896)

**APPROVED BY:** Glenn Kephart, Public Works Manager (x8205)

**LEGAL REVIEW BY:** Judi Morgan, Assistant City Attorney (x8227)

**FISCAL NOTE:** Sufficient funds are available in Capital Improvement Fund No. 7044.

**RECOMMENDATION:** Approve professional services contract and authorize the Mayor to execute all necessary documents.

**ADDITIONAL INFO:** The staff at the Kyrene Water Reclamation Plant has identified a number of ongoing operational challenges relating to the water treatment process, scum removal equipment, process aeration and influent screening facilities. Greeley and Hansen will conduct an evaluation of the facility based on a review of both historic plant data and new data by conducting targeted sampling and testing. They will also conduct operational workshops with plant operations and management staff and recommend operational changes and/or specific equipment improvements.

The contract amount was negotiated by staff and is considered reasonable for the scope of services. Greeley and Hansen was selected from our consultant on-call list based on a process set forth in Title 41 of the Arizona Revised Statutes.

CITY OF TEMPE, ARIZONA  
PUBLIC WORKS DEPARTMENT  
DIVISION OF ENGINEERING

 **COPY**

**CONTRACT FOR PROFESSIONAL SERVICES**

This Contract is made and entered into on the 22nd day of July, 2008, by and between the City of Tempe, a municipal corporation, hereinafter called City, and Greely and Hansen, an Ohio Limited Liability Corporation, hereinafter called the Consultant.

The City engages the Consultant to perform professional services for a project known and described as Kyrene Water Reclamation Plant Process Overview, Project No. 32-997044, hereinafter called the "Project".

**1. SERVICES OF THE CONSULTANT**

The Consultant shall perform the following professional services to City in conformance with applicable professional standards and in accordance with the degree of care and skill that a registered professional in Arizona would exercise under similar conditions. Consultant's services shall include the following:

- 1.1. The Consultant shall conduct an evaluation of the existing Kyrene Water Reclamation Plant operations and equipment, collect and analyze data, recommend improvements and/or operational changes, and conduct workshops with staff, and as described in Exhibit A attached hereto and incorporated herein by this reference.
- 1.2. The Consultant has assigned Gustavo Lopez, P.E., as the Project Manager for this Contract. Prior written approval by the City is required in the event the Consultant needs to change the Project Manager. The Consultant shall submit the qualifications of the proposed substituted personnel to the City for approval prior to any substitution or change.
- 1.3. The Consultant shall perform the work in a manner and at times which do not impede or delay the City's operations and/or functions.
- 1.4. The Consultant shall be solely responsible for any repair, replacement, remediation and/or clean-up of any damage done by Consultant including any impairment of access to City or other lawful invitees, by such work performed on this Project.

**2. PERIOD OF SERVICE**

The Consultant shall complete all services within 180 calendar days of the "Notice to Proceed" date, which shall be issued by the City. In the event delays are experienced beyond the control of the Consultant, period of service may be revised as approved by the City in its sole discretion.

### **3. CONSULTANT'S COMPENSATION**

- 3.1. Total compensation for the services performed shall not exceed \$64,571.00, unless otherwise authorized by the City. This fee includes an amount not to exceed \$49,771.00 based on hourly rates established in the attached Exhibit A, an allowance of \$10,000.00 for additional workshops and meetings as required by the City, and an allowance of \$4,800.00 for reimbursable expenses, which in no event will ever be more than actual cost.
- 3.2. The City shall pay the Consultant installments based upon monthly progress reports and detailed invoices submitted by the Consultant. If detailed invoice(s) are approved by the City, such payments shall be made within thirty (30) days after City's approval of the progress report and detailed invoice.

### **4. THE CITY'S RESPONSIBILITIES**

- 4.1. The City shall designate a project manager during the term of this Contract. The project manager has the authority to administer this Contract and shall monitor compliance with all terms and conditions stated herein. All requests for information from or a decision by the City on any aspect of the work shall be directed to the project manager.
- 4.2. The City shall review submittals by the Consultant and provide a prompt response to questions and rendering of decisions pertaining thereto, to minimize delay in the progress of the Consultant's work. The City will keep the Consultant advised concerning the progress of the City's review of the work. The Consultant agrees that the City's inspection, review, acceptance or approval of Consultant's work shall not relieve Consultant of its responsibility for errors or omissions of the Consultant or its sub-consultant(s).
- 4.3. Unless included in the Consultant's services as identified in Section 1, the City may elect but is not required to furnish the Consultant, the following information or services for this Project, upon reasonable request:
  - 4.3.1. One copy of its maps, records, laboratory tests, survey ties, and benchmarks, or other data pertinent to the services. However, the Consultant shall be solely responsible for searching the records and requesting specific drawings or information and independently verifying said information.
  - 4.3.2. Available City data relative to policies, regulations, standards, criteria, studies, etc., relevant to the Project.

- 4.3.3. When required, title searches, legal descriptions, detailed ALTA Surveys, and environmental assessments.

## **5. TERMINATION AND DEFAULT**

- 5.1. The City shall be entitled to terminate this Contract at any time, in its discretion. In addition, the City may terminate this Contract for default, non-performance, breach or convenience, or abandon any portion of the Project for which services have not been fully or properly performed by the Consultant. Termination shall be commenced by delivery of written notice delivered to Consultant, personally or by certified mail at 2800 N. 44<sup>th</sup> Street, Suite 650, Phoenix, Arizona, 85008. Termination shall be effective upon fourteen (14) days of delivery of notice to Consultant. In addition, this Contract may be terminated pursuant to A.R.S. § 38-511.
- 5.2. Upon the occurrence of Consultant's default, non-performance or breach of the Contract, City may recover any and all damages permitted by law or in equity against Consultant, in addition to termination of the Contract, including but not limited to compensatory damages, together with all costs and expenses as set forth in Section 12 herein.
- 5.3. Immediately after receiving such notice, the Consultant shall discontinue advancing the services under this Contract and proceed to close said operations under this Contract. The Consultant shall appraise the services it has completed and submit a detailed appraisal to the City for evaluation. The City shall have the right to inspect the Consultant's work to analyze and appraise the services completed. Payment to Consultant shall be determined by City upon approval or disapproval of the services completed as of the date of delivery of notice of termination.
- 5.4. Within ten (10) days of receipt of notice of termination as set forth herein, the Consultant shall deliver to the City all drawings, special provisions, field survey notes, reports, estimates and any and all other documents or work product generated by the Consultant under the Contract, entirely or partially completed, together with all unused materials supplied by the City.
- 5.5. In the event of such termination or abandonment, the Consultant shall be paid only for those services performed in a good and workmanlike manner, in accordance with all plans, specifications and governmental requirements completed prior to receipt of said notice of termination, subject to approval by City. Such payment may include reimbursable expenses then incurred by Consultant, in City's sole discretion.
- 5.6. If the remuneration scheduled hereunder is based upon a fixed fee or definitely ascertainable sum, the portion of such sum payable shall be proportionate to the percentage of services completed by the Consultant as approved by the City based

upon the scope of work set forth in Exhibit A, as determined by the City. However, in no event shall the fee exceed that set forth in Section 3 of this Contract.

- 5.7. The City shall make a determination as to approval or denial of any requested final payment within sixty (60) days after the Consultant has delivered the last of the completed items and the final fee has been submitted to the City.

## 6. INSURANCE

Without limiting any obligations or liabilities, the Consultant, at its sole expense, shall purchase and maintain the minimum insurance specified below with companies duly licensed or otherwise approved by the State of Arizona, Department of Insurance, and with forms reasonably satisfactory to the City. Each insurer shall have a current A.M. Best Company, Inc. rating of not less than A-VII. Use of alternative insurers requires prior approval from the City.

### 6.1. General Clauses

- 6.1.1. Additional Insured. The insurance coverage, except workers' compensation and professional liability, required by this Contract, shall name the City, its agents, representatives, directors, officials, and employees, as additional insured, and shall specify that insurance afforded the Consultant shall be primary insurance, and that any self insured retention and/or insurance coverage carried by the City or its employees shall be excess coverage, and not contributory coverage to that provided by the Consultant.
- 6.1.2. Coverage Term. All insurance required herein shall be maintained in full force and effect until services required to be performed under the terms of this Contract are satisfactorily completed and formally accepted; failure to do so shall constitute a material breach of this Contract.
- 6.1.3. Primary Coverage. The Consultant's insurance shall be primary insurance as respects the City, and any insurance or self insurance maintained by the City shall be in excess of the Consultant's insurance and shall not contribute to it.
- 6.1.4. Claim Reporting. Consultant shall not fail to comply with the claim reporting provisions of the policies or cause any breach of a policy warranty that would affect coverage afforded under the policy to protect the City.
- 6.1.5. Waiver. The policies for workers' compensation and general liability shall contain a waiver of transfer rights of recovery (subrogation) against the City, its agents, representatives, directors, officers, and employees for any claims arising out of the work of the Consultant.

- 6.1.6. Deductible/Retention. The policies may provide coverage, which contains deductibles or self-insured retentions. Such deductible or self-insured retentions shall not be applicable with respect to the coverage provided to the City under such policies. The Consultant shall be solely responsible for deductible or self-insured retentions and the City may require the Consultant to secure the payment of such deductible or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.
- 6.1.7. Policies and Endorsements. The City reserves the right to request and to receive, within ten (10) working days, information on any or all of the above policies or endorsements.
- 6.1.8. Certificates of Insurance. Prior to commencing services under this Contract, Consultant shall furnish the City with certificates of insurance, or formal endorsements as required by the Contract, issued by Consultant's insurer(s), as evidence that policies providing the required coverages, conditions, and limits required by this Contract are in full force and effect. Such certificates shall identify this Contract by referencing the project number and/or project name and shall provide for not less than thirty (30) days advance written notice by certified mail to City of cancellation or termination of insurance.
- 6.1.9. Sub-Consultants/Contractors. Consultant shall include all sub-consultants and sub-contractors as insured under its policies or shall furnish separate certificates and endorsements for each subconsultant and subcontractor.
- 6.2. Workers' Compensation. The Consultant shall carry workers' compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant's employees engaged in the performance of the services; and employer's liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

In case services under this Contract are sub-contracted, the Consultant shall require all sub-consultant(s) to provide workers' compensation and employer's liability to at least the same extent as provided by the Consultant.

- 6.3. Automobile Liability. The Consultant shall carry commercial/business automobile liability insurance with a combined single limit for bodily injury and property damages of not less than \$1,000,000 each occurrence regarding any owned, hired, and non-owned vehicles assigned to or used in performance of the Consultant services. Coverage will be at least as broad as coverage Code 1 "any auto" (Insurance Service Office policy form CA 0001 1/87 or any replacements thereof). Such coverage shall include coverage for loading and unloading hazards.

- 6.4. Commercial General Liability. The Consultant shall carry commercial general liability insurance with a combined single limit of not less than \$1,000,000. The policy shall be primary and include coverage for bodily injury, property damage, personal injury, products, completed operations, and blanket contractual covering, but not limited to, the liability assumed under the indemnification provisions of this Contract, which coverage will be at least as broad as Insurance Service Office policy form CG 0002 1-11-88 or any replacement thereof.

In the event the general liability insurance policy is written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of the services as evidenced by annual certificates of insurance.

Such policy shall contain a "severability of interests" provision (also known as "cross liability" and "separation of insured").

- 6.5. Professional Liability. The Consultant retained by the City to provide the engineering services required by the Contract will maintain professional liability insurance covering errors and omissions arising out of the services performed by the Consultant or any person employed by it, with an unimpaired limit of not less than \$1,000,000 each claim and \$1,000,000 all claims, or 10% of the construction budget, whichever is larger. In the event the insurance policy is written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of services as evidenced by annual certificates of insurance.
- 6.6. Property Coverage – Valuable Papers. The Consultant shall carry property coverage on all-risk, replacement cost, agreed amount form with valuable papers insurance sufficient to assure the restoration of any documents, memoranda, reports, or other similar data relating to the services of the Consultant used in the completion of this Contract.

## **7. HEALTH INSURANCE REQUIREMENTS**

- 7.1. Consultant must certify that it has or will offer health insurance to all eligible employees working on services set forth in this Contract prior to the performance of any work or services. An affidavit certifying such offering must be signed in a form approved by the City. All required health insurance must be maintained during the entire time of the Contract with the City. Health insurance pursuant to this Section 7 is not required for temporary employees or students working part-time who are enrolled in a recognized educational institution.
- 7.2. The health insurance requirements herein shall apply to all of Consultant's eligible employees directly involved with the services set forth in this Contract, including support and administrative personnel.
- 7.3. Any and all complaints concerning violations of the health insurance requirements shall be filed, in writing, with the City's Public Works Department, within thirty

(30) days from discovery of a potential violation. An administrative hearing will be held before the Public Works Manager, and a written decision of findings will be provided to the parties to the hearing within ten (10) days thereafter. Appeal from the decision of the Public Works Manager may be made within ten (10) days of the date of the decision by filing a notice of appeal in writing with the Public Works Department. If an appeal is timely filed, an administrative hearing will be held before an administrative hearing officer appointed by the City Manager. The decision of the administrative hearing officer shall be final.

- 7.4. Penalties for failing to comply with this Section 7 include, but are not limited to the following: Consultant may be barred from bidding on, or entering into any Public Works contract with the City for a period of three (3) years from the execution of the contract.
- 7.5. All Consultants subject to the health insurance requirements shall post in English, notice of the health insurance requirements at their office and at the job site.

## **8. WORK FOR HIRE AND OWNERSHIP OF DELIVERABLES**

- 8.1. Consultant shall ensure that all the results and proceeds of Consultant's and any and all work on any projects, including that of all agents, employees, officers, and contractors, shall be owned by the City, including the copyright thereto, as work for hire. In the event, for any reason, such results and proceeds are not deemed work for hire, Consultant shall be deemed hereby to have assigned to City all of its right, title and interest in such results and proceeds and content to City, without limitation.
- 8.2. All work products (electronically or manually generated), including but not limited to plans, specifications, cost estimates, tracings, studies, design analyses, original mylar drawings, computer aided drafting and design (CADD) file diskettes which reflect all final drawings, and other related products which are prepared in the performance of this Contract, are the property of the City and are to be delivered to the City on the particular type of storage media on which they are stored (e.g. CD, thumb drive, etc.) before the final payment is made to the Consultant. The City shall retain ownership of these original works. If approved in writing by the City, the Consultant may retain the originals and supply the City with reproducible copies of the work.

## **9. CONFLICT OF INTEREST**

- 9.1. The Consultant agrees to promptly disclose any and all financial and/or economic interest in the property, or any property affected by the work, or the Project itself other than as set forth herein, existing prior to the execution of this Contract. Further, the Consultant agrees to promptly disclose any financial or economic interest in the Project property or any property affected by the work, if the Consultant gains such interest during the course of this Contract.

- 9.2. If the Consultant gains any financial or economic interest in the Project during the course of this Contract, this may be grounds for terminating this Contract at the sole discretion of the City.
- 9.3. The Consultant shall not engage the services on this Contract of any present or former City employee who was involved as a decision maker in the selection or approval processes, or who negotiated or approved billings or contract modifications for this Contract.
- 9.4. The Consultant agrees that it shall not perform services on this Project for any other contractor, sub-contractor, or any supplier, other than the City. In addition, Consultant shall not negotiate, contract, or make any agreement with a contractor, sub-contractor, or any supplier with regard to any of the work under this Contract, or any services, equipment or facilities to be used on this Project other than with the City.

## **10. COVENANT AGAINST CONTINGENT FEES**

The Consultant affirms that it has not employed or retained any company or person, other than a bona fide employee working for the Consultant to solicit or secure this Contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Contract. For breach or violation of this clause, the City may terminate this Contract without liability, or in its discretion may deduct from the Contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage brokerage fee, gift, or contingent fee.

## **11. INDEMNIFICATION**

To the fullest extent permitted by law, the Consultant shall defend, indemnify and hold harmless the City, its agents, officers, officials, and employees from and against all claims, damages, losses, liability and/or expenses, relating to, arising out of, or alleged to have resulted from the negligent acts, errors, mistakes or omissions in the work, services, or professional services of the Consultant, its agents, employees, or any other person for whose negligent acts, errors, mistakes or omissions in the work, services, or professional services the Consultant may be deemed legally liable in the performance of this Contract, or any breach of the Contract. Consultant's duty to defend, hold harmless and indemnify the City, its agents, officers, officials, and employees shall arise in connection with any and all claims for damage, loss, liability and/or expenses that are attributable to bodily injury, sickness, disease, death, or injury to, impairment or destruction of any person or property including loss of use resulting therefrom, caused by any negligent acts, errors, mistakes, omissions, work, services, willful acts or professional services rendered in the performance of this Contract. The amount and type of insurance coverage requirement set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

## **12. DISPUTE RESOLUTION**

In the event of a dispute concerning or in any way connected to the Contract or subject project, the parties agree that the unsuccessful party shall pay to the prevailing party a reasonable sum for attorneys' fees, including taxable and non-taxable costs, fees, costs and disbursements of experts, professionals, paralegals, whether at trial, appeal and/or in bankruptcy court, all of which will be deemed to have accrued on the commencement of such action and shall be enforceable whether or not such action is prosecuted to judgment. In addition, should the City retain and/or utilize legal counsel as a result of a breach by Consultant of any term, covenant or provision of this Contract, in addition to paying any recovery owed to City and/or performing any obligation remaining to be performed, in order to fully cure such breach or default, Consultant shall reimburse the City for reasonable attorneys' fees, taxable and non-taxable costs and disbursements, incurred by the City in enforcing the Consultant's obligations, whether or not a legal action is commenced, including but not limited to the cost of preparing and presenting default notices, demand letters and similar non-judicial enforcement activities.

## **13. ADDITIONAL SERVICES**

Additional services which are outside the scope of basic services contained in this Contract shall not be performed by the Consultant without prior written authorization from the City, at the City's sole discretion. Additional services, when authorized by an executed contract or an Amendment to this Contract shall be compensated for by a fee mutually agreed upon between the City and the Consultant.

## **14. PROHIBITION ON ASSIGNMENT**

This Contract and all duties and obligations of Consultant set forth in this Contract shall not be assignable except by prior written consent of the City, and such prohibition shall extend to and be binding upon the heirs, executors, administrators, successors, and assigns of the Consultant.

## **15. MISCELLANEOUS PROVISIONS**

- 15.1. Equal Opportunity. The Consultant covenants for itself, its employees, agents, assigns and all persons claiming under or through it, that it shall comply with all applicable federal, state, and local laws and ordinances at the time of execution of this Contract and shall not discriminate against or segregate any person or group of persons any person on account of race, color, religion, gender, marital status, sexual orientation, national origin, ancestry, age, physical handicap or medical condition in the performance of this Contract and shall comply with the terms and intent of all applicable federal, state and local governance concerning nondiscrimination.

Legal Compliance. In addition, Consultant covenants that it will comply with any and all governmental restrictions, regulations and rules of duly constituted authorities having jurisdiction insofar as the performance of the work and all applicable safety laws, rules and regulations, including but not limited to the Fair Labor Standards Act, the Walsh Healey Act, the Fair and Legal Employment Act

and Arizona law concerning employment practices and working conditions. Consultant acknowledges that a breach of this warranty is a material breach of this Contract and Consultant is subject to penalties for violation(s) of this provision, including termination of this Contract. City retains the right to inspect the documents of any and all contractors, subcontractors and sub-subcontractors performing work and/or services relating to the Contract to ensure compliance with this warranty. Consultant shall indemnify, defend and hold City harmless for, from and against all losses and liabilities arising from any and all violations thereof.

- 15.2. Specially Designated Nationals and Blocked Persons List. Consultant represents and warrants to City that neither Consultant nor any affiliate or representative of Consultant (i) is listed on the Specially Designated Nationals and Blocked Persons List maintained by the Office of Foreign Asset Control, Department of the Treasury (OFAC) pursuant to Executive Order no. 13224, 66 Fed.Reg. 49079 ("Order"); (ii) is listed on any other list of terrorists or terrorist organizations maintained pursuant to the Order, the rules and regulations of OFAC or any other applicable requirements contained in any enabling legislation or other related Order(s); (iii) is engaged in activities prohibited in the Order; or (iv) has been convicted, pleaded nolo contendere, indicted, arraigned or custodially detained on charges involving money laundering or predicate crimes to money laundering.

The Consultant further agrees to include the foregoing provisions in any and all sub-contracts hereunder, except sub-contracts for standard commercial supplies or raw materials. Any violation of such provisions shall constitute a material breach of this Contract.

- 15.3. Effective Date. This Contract shall be in full force and effect only when it has been approved by the City Council of the City of Tempe, Arizona and when executed by the duly authorized City officials and the duly authorized agent of the Consultant.
- 15.4. Governing Law. This Contract shall be governed and interpreted by the laws of the State of Arizona.
- 15.5. Exhibits. All Exhibits attached to this Contract are made a part of and are incorporated into, this Contract. If any inconsistencies exist between this Contract and any Exhibit hereto, the terms of this Contract shall govern.
- 15.6. Force Majure. Any prevention, delay or stoppage of this Project for a cause beyond the reasonable control of Consultant due to acts of God, acts of war or terrorism, fire or other casualty, shall, notwithstanding anything to the contrary contained herein, excuse the performance of Consultant, for a period equal to such prevention, delay or stoppage. For purposes of this Section 15.6, a cause shall not be deemed beyond a party's control if it is within the control of such party's agents, employees, assigns, contractors or sub-contractors.
- 15.7. Entire Agreement. This Contract contains all of the agreements of the parties with

respect to the Project and related matters, and no prior agreement, negotiations, postings, offerings, or understanding pertaining to any such matter shall be effective for any purpose unless expressly contained herein.

- 15.8. **Consultant's Good Standing.** Consultant hereby warrants and represents that it is an Ohio limited liability company, licensed to do business in the state of Arizona and currently in good standing, and that it is not now in violation of any agreement, instrument, contract, law, rule or regulation by which Consultant is bound.
- 15.9. **Independent Contractor.** Nothing contained in this Contract shall be deemed or construed by the parties hereto or otherwise, to create the relationship of principal and agent, partnership, joint venturer, employer and employee, or any association between City and Consultant. Consultant is an independent contractor and shall be solely responsible for any unemployment or disability insurance payments, or any social security, income tax or other withholdings, deductions or payments that may be required by federal, state or local law with respect to any compensation paid to the Consultant hereunder or for any and all services or materials provided by or rendered to Consultant hereunder in connection with the work set forth in this Contract.
- 15.10. **Severability.** If any provision of this Contract shall, to any extent, be determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Contract shall not be affected thereby, and every other term and provision of this Contract shall be valid and enforceable to the fullest extent permitted by law.
- 15.11. **Time of the Essence.** Time is of the essence in this Contract and each and every provision herein, except as may expressly be provided in writing by the City.
- 15.12. **No Waiver.** No breach or default hereunder shall be deemed to have been waived the City, except by a writing to that effect signed on behalf of the City. No waiver of any such breach or default shall operate as a waiver of any other succeeding or preceding breach or default or as a waiver of that breach or default after written notice thereof and demand by the City for strict performance of this Contract. Acceptance of partial or delinquent payments or performance shall not constitute the waiver of any right of the City.
- 15.13. **Survival.** Any and all representations, obligations, indemnities, warranties, covenants, conditions and agreements contained in this Contract which are expressed as surviving the expiration or earlier termination of this Contract, or by their nature, are to be performed, observed or survive, in whole or in part, after the termination or expiration of this Contract Term, shall survive the termination or expiration of this Contract.

**The Consultant warrants that the person who is signing this Contract on behalf of the Consultant is authorized to do so and to execute all other documents necessary to carry out the terms of this Contract.**

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

CITY OF TEMPE, ARIZONA

By \_\_\_\_\_  
Mayor

By \_\_\_\_\_  
Public Works Manager

ATTEST:

\_\_\_\_\_  
City Clerk

Recommended By:

\_\_\_\_\_  
Deputy PW Manager/City Engineer

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

CONSULTANT  
Greeley and Hansen

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Federal I.D. No. /Social Security No.

Certified to be a true and exact copy.

\_\_\_\_\_  
Karen M. Fillmore  
Records Specialist

**CITY OF TEMPE  
TEMPE, ARIZONA  
DEPARTMENT OF PUBLIC WORKS**

**AFFIDAVIT OF GENERAL CONTRACTOR / PRIME CONSULTANT  
REGARDING  
HEALTH INSURANCE**

\_\_\_\_\_,  
Arizona

Date \_\_\_\_\_

**Kyrene Water Reclamation Process Overview  
Project No. 32-997044**

I hereby certify that \_\_\_\_\_ (name of company) currently has, and all of its major subcontractors/subconsultants, defined as doing work in excess of \$30,000.00, will have, during the course of this contract, health insurance for all employees working on this project and will offer health insurance coverage to eligible dependents of such employees, as defined in the accompanying Guidelines. The company's health insurance is as follows:

Name of Insurance Company: \_\_\_\_\_

Type of Insurance (PPO, HMO, POS, INDEMNITY): \_\_\_\_\_

Policy No.: \_\_\_\_\_

Policy Effective Date (MM/DD/YY): \_\_\_\_\_

Policy Expiration Date (MM/DD/YY): \_\_\_\_\_

Signed and dated at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

\_\_\_\_\_  
General Contractor/Prime Consultant

By: \_\_\_\_\_

STATE OF ARIZONA            )  
  ) ss  
COUNTY OF MARICOPA        )

SUBSCRIBED AND SWORN to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

\_\_\_\_\_  
Notary Public

My commission expires:

\_\_\_\_\_

**City of Tempe**  
**Guidelines for Implementation of Health Insurance**

These Guidelines are provided for purposes of implementing Resolution No. 2000.73, which requires all employees of prime consultants, general contractors and major subconsultants and subcontractors to have health insurance and to offer health insurance to their eligible dependants, as determined at the start of each project. Questions regarding these guidelines should be directed to the City of Tempe Engineering Division at (480) 350-8200.

1. All Prime Consultants who enter into a Public Works contract or General Contractors who bid on Public Works projects that are advertised for bid and enter into a contract in excess of \$30,000 with the City of Tempe after January 1, 2001, are required to sign an affidavit in the form attached hereto. The prime consultant or general contractor shall require that all major subconsultants or subcontractors, defined as entities doing work in excess of \$30,000, comply with the health insurance requirements. In signing the affidavit, prime consultants and general contractors may refer to and rely upon these Guidelines for interpretation.
2. Health insurance is required for permanent employees who work for the consultant/contractor more than one hundred and twenty (120) days in any calendar year. A "work day" consists of any time within a twenty-four hour period, regardless of number of hours, that the individual is paid. This requirement excludes students working part-time who are enrolled in a recognized educational institution. Many companies have a grace period or a qualifying period prior to commencement of insurance coverage, which is acceptable so long as the employee coverage begins by the 120<sup>th</sup> day of contract signing. Temporary employees will be covered to the same extent as the City of Tempe covers temporary employees as determined at the start of each project.
3. If a contractor is a "Union" shop and withholds union dues from employees for health insurance coverage that is also offered to their eligible dependents and meets all City requirements, the Contractor may so note on the required affidavit.
4. The health insurance requirements herein apply to all employees that are directly involved with the City of Tempe project including support and administrative personnel.
5. Health insurance coverage must be maintained during the entire time of the contract, including any warranty periods, with the City.
6. All complaints concerning violations of the health insurance requirements shall be filed by an employee, in writing, with the Public Works Department, within thirty (30) days from discovery of the violation. An administrative hearing will be held before the Public Works Manager, and a written decision of findings will be provided to the parties to the hearing within ten (10) days thereafter. Appeal from the decision

of the Public Works Manager may be made within ten (10) days of the date of the decision by filing a notice of appeal in writing with the Public Works Department. If an appeal is timely filed, an administrative hearing will be held before an administrative hearing officer appointed by the City Manager. The decision of the administrative hearing officer shall be final.

7. In the event of a finding by the City of a violation of the insurance provisions, the company in violation of the provision shall be barred from bidding on, or entering into, any public works contract with the City for a minimum period of three (3) years.
8. All consultants and contractors subject to the health insurance requirements shall post, in English and Spanish, notice of the health insurance requirements at their office and at the job site. Signs for posting will be provided by the City.

These "Guidelines for Implementation of Health Insurance", issued and dated this 21st day of August, 2002, hereby amend all guidelines previously issued.

  
Glenn Kephart, P.E.  
Public Works Manager

City of Tempe

# EXHIBIT A

## Existing Process Overview at Kyrene Water Reclamation Plant

## Scope of Engineering Services and Fee Proposal

July 1, 2008



**GREELEY AND HANSEN**

*PH*

City of Tempe

Existing Process Overview at Kyrene Water Reclamation Plant

**Scope of Engineering Services and Fee Proposal**

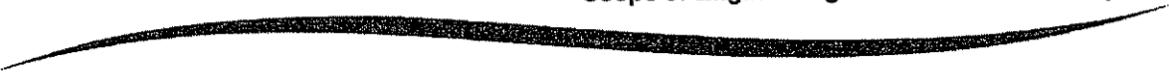


EXHIBIT A

Scope of Engineering Services



GREELEY AND HANSEN

RMB

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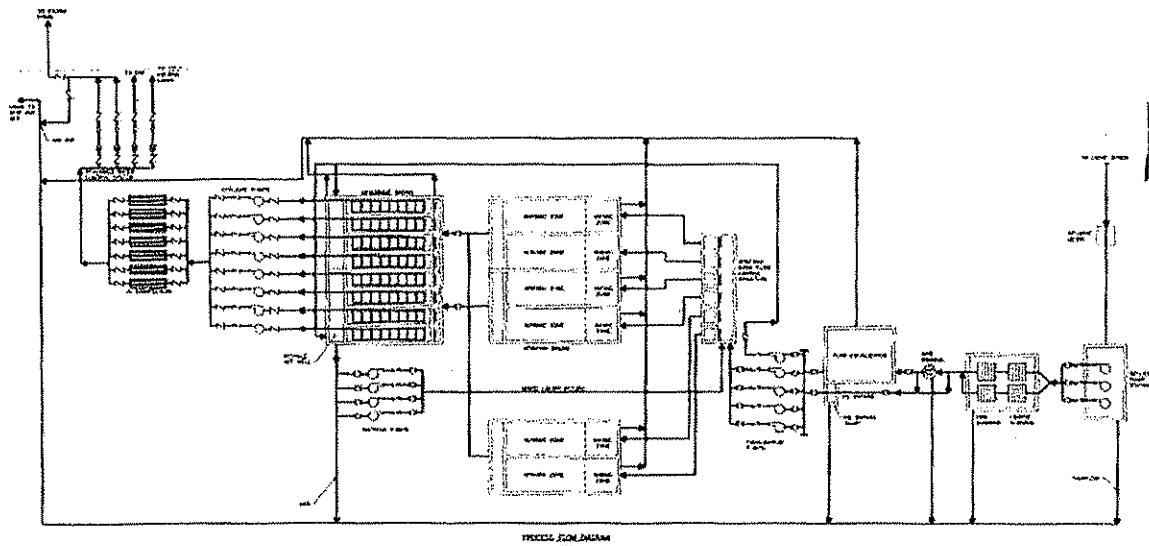
## Scope of Engineering Services and Fee Proposal

### Exhibit A – Scope of Engineering Services

## Introduction

The Kyrene Wastewater Treatment Plant in Tempe, Arizona currently operates at an approximate average daily flow of 4 MGD. The original conventional activated sludge plant has been retrofitted to a Membrane Bioreactor (MBR) facility. It is understood that the general process configuration for the bioreactor follows a Ludzack-Ettinger (LE) configuration. This includes an anoxic zone for substrate-based denitrification and the return of the mixed liquor from the membrane unit to the anoxic zones.<sup>1</sup> This is illustrated in Figure 1.

**Figure 1**  
**Kyrene WWTP Process Diagram**



Over the past 12 months, the plant operations and maintenance staff have identified several areas of concern that appear to impact the overall operation of the plant. It is believed that these problem areas may be rooted in the treatment process, mechanical systems or both. As requested, this document outlines a scope of services to investigate, analyze and evaluate these areas of concern and prepare recommendations, if appropriate, for consideration by the Kyrene staff on operational changes, or specific improvements/upgrades in the plant to address the concerns.

It should be noted that the services described in this document are in no way intended to be a critique, challenge, or rebut of the judgments and opinions on plant design, operating performance or maintenance effectiveness of either the City of Tempe or any of the professional consultants the City has retained related to the Kyrene WWTP facility. Rather, the services described herein are in response to the City of

<sup>1</sup> This process configuration with respect to operations requires confirmation with plant operators.

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**Scope of Engineering Services and Fee Proposal**

Exhibit A – Scope of Engineering Services

Tempe's request for further evaluations in an effort to continue to improve upon its record of excellence in owning and operating a pollution control facility.

Greeley and Hansen is available to commence work on these scope items upon a notice to proceed from the City. Greeley and Hansen proposes completion of the evaluations, preparation of the technical memorandums and the associated workshops and field coordination with Kyrene staff within four months of the notice to proceed. This time frame allows for the Kyrene staff to collect the set of special samples and conduct the necessary data analyses to support the mass balance development described in the series and tasks below.

Greeley and Hansen will coordinate with the Kyrene staff to schedule and conduct the workshops at strategic times throughout the proposed four-month work schedule.

## **Series 100 – Project Management**

This series of professional services consists of overall project management and coordination, including the administrative tasks necessary to maintain the overall project budget and schedule.

## **Series 200 – Process Evaluation**

### **Task 210 – Nitrogen Analysis**

Recent historical data on plant process performance shows periods where nitrate spikes are measured in the final effluent. This is a concern because of the impact these have had on compliance with total nitrogen limits. Using process and operating data provided by the Kyrene plant staff, Greeley and Hansen will conduct a review of the plant performance with respect to nitrogen and organic removals, and correlate (to the best degree practical within the limits of the data set) with the operating data of the plant.

As applicable, Greeley and Hansen will identify/confirm the nitrate excursions and develop hypotheses that describe the fundamental causes within the context of the influent wastewater characterization and the plant operational data. Greeley and Hansen will present these findings to the Kyrene Team and the Water Utilities Department Manager in the form of a technical memorandum and if requested, coordinate any practical changes in current operational strategy that would accommodate a "test" of the hypotheses.

Greeley and Hansen will also review the immediate past year's pretreatment data (provided by Kyrene's industrial pretreatment office) to determine if there are pollution source issues that may be contributing to the elevated nitrate levels. This review is intended to be cursory only.

### **Meetings**

- Nitrogen Analysis Workshop (2 hours). Greeley and Hansen will conduct a two-hour workshop with Kyrene staff (operations, maintenance, laboratory, and others as appropriate) to review the data analysis methodology and the findings of the data review.



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**Scope of Engineering Services and Fee Proposal**

Exhibit A – Scope of Engineering Services

**Deliverables**

- Nitrogen Analysis Letter Report (email with attachment). The letter report will include the data analysis methodology, findings of the data review, summary of the workshop discussion, the hypotheses for nitrate spikes (including the theory and the operations), and outline a set of full-scale field “tests” with respect to process and/or operational adjustments (WAS rates, RAS rates, IMLR rates, air supply rates, F/M, SRT, etc.) that could be practically implemented to verify/confirm the hypotheses

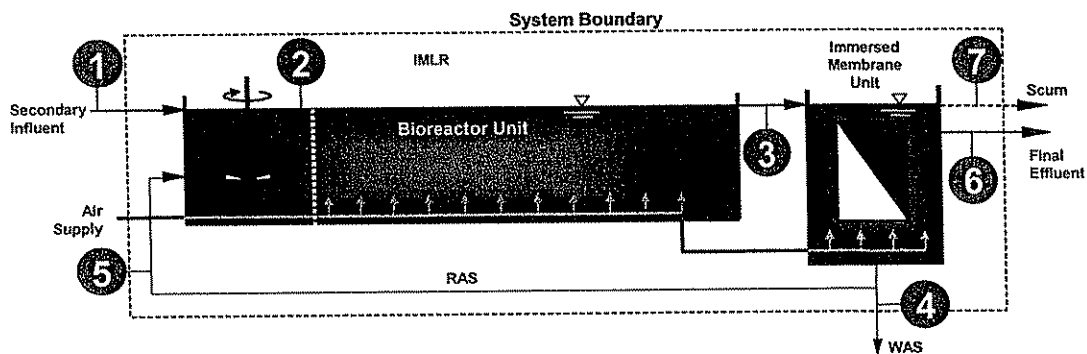
**Task 220 – Mass Balance Analysis**

Because a biological treatment process involves the creation and destruction of mass and energy across the system, understanding how these dynamics impact the process performance is crucial. Resolving process issues, like that of the nitrate spikes raised in Task 210, is best accomplished by developing a set of mass balances around the system. These mass balances are generally established from data collected over a period of reasonably steady state operating conditions.

In conjunction, and concurrently with Task 210, Greeley and Hansen will work with the Kyrene staff to establish the sampling and monitoring protocol for their current process and operational modes to confirm appropriateness of the various sample locations and frequencies to calculate the mass balances on COD, nitrogen and solids. Greeley and Hansen will coordinate with Kyrene staff to identify the proper locations within the biological treatment process to collect sets of daily samples (preferably flow-proportioned composites) for a period of three weeks (or 2 SRTs, whichever is greater).

The mass balance framework with the preferred sampling points is shown schematically in **Figure 2** below. **Table 1** defines what the locations represent in the process and the parameters needed for analysis at these points.

**Figure 2**  
**System Boundary for MBR Mass Balance Development**



## Scope of Engineering Services and Fee Proposal

### Exhibit A – Scope of Engineering Services

**Table 1**  
**Sampling for Mass Balance Development**

Identifier	Process Location	Parameters to be Monitored
1	Influent to Bioreactor	$Q_i$ , COD, sCOD, TSS, TKN, NH <sub>4</sub> -N
2	End of Anoxic Zone	COD, sCOD, MLSS, TKN, NH <sub>4</sub> -N, NO <sub>3</sub> -N, NO <sub>2</sub> -N, DO
3	Secondary Effluent	COD, sCOD, MLSS, TKN, NH <sub>4</sub> -N, NO <sub>3</sub> -N, NO <sub>2</sub> -N, DO
4	WAS	$Q_{WAS}$ , COD, sCOD, MLSS, TKN, NH <sub>4</sub> -N, NO <sub>3</sub> -N, NO <sub>2</sub> -N
5	RAS	$Q_{RAS}$ , COD, sCOD, MLSS, TKN, NH <sub>4</sub> -N, NO <sub>3</sub> -N, NO <sub>2</sub> -N
6	Permeate Effluent	$Q_e$ , COD, sCOD, TSS, TKN, NH <sub>4</sub> -N, NO <sub>3</sub> -N, NO <sub>2</sub> -N, DO
7	Scum Removal	$Q_{SCUM}$ , COD, TSS
8	Air Supply: Process air and scour air	Rates, cfm

The information presented in **Table 1** is considered comprehensive for developing reasonable mass balances for organics, nitrogen and solids. However, Greeley and Hansen recognizes that sample collection and analysis over and above normal daily/weekly routines has a budget impact to the utility. Therefore, if necessary, certain assumptions can be made at the outset to simplify the protocol, while still preserving the integrity of the analysis. For example, the assumption that WAS (point 5) and RAS (point 6) are equivalent can be made if WAS is drawn directly from the RAS line. Similarly, the assumption can be made that the secondary effluent (point 3) and the internal mixed liquor recycle (point 4) are equivalent provided that the recycle is taken from the end of the aerobic zone of the bioreactor in the vicinity of the secondary effluent discharge. Greeley and Hansen also recognizes that there may be physical constraints that simply inhibit a sample from being taken from a particular location. Greeley and Hansen will work closely with Kyrene staff to prepare the sampling protocols to ensure that a reasonable mass balance is achievable.

### Meetings

- Mass Balance Workshop (2 hours). Greeley and Hansen will conduct a two-hour workshop with the Kyrene operations staff to discuss the use of mass balance as a process control tool and its implications for the Kyrene plant operations.

### Deliverables

- Mass Balance Technical Memorandum (email with attachment). From the sampling data results, Greeley and Hansen will develop a mass balance for COD nitrogen, and solids (with emphasis on nitrogen because of its compliance sensitivity) for steady state operations of the existing MBR process unit for current flow and loading conditions. These balances will serve as the baseline for

**Scope of Engineering Services and Fee Proposal**  
Exhibit A – Scope of Engineering Services

developing new or revised Standard Operating Procedures (SOPs) for the existing MBR plant operations to address the process performance concerns raised by the Kyrene plant. These will be presented in the form of a letter report. Greeley and Hansen will coordinate implementation of these SOPs with Kyrene staff.

## **Series 300 – Scum Removal Evaluations**

Since start-up of the new MBR facility, the Kyrene operations and maintenance staff has struggled with removal of scum and foam that form in the bioreactor and accumulate in the membrane solids separation units. Managing scum has raised concerns that this problem contributes to process control and can have compliance implications.

Greeley and Hansen will conduct a review of the existing facilities for scum removal and meet with operations and maintenance staff to receive their input and insights on the accompanying related operational issues.

### **Meetings**

- Scum Removal Alternatives Meeting (2 Hours)

### **Deliverables**

- Scum Removal Alternatives Technical Memorandum (email with attachment). Greeley and Hansen will work with the Kyrene operations and maintenance staff to develop a maximum of three alternatives for changes in operational strategies or changes to the scum removal mechanical equipment. These alternatives, along with order of magnitude costs estimates, will be presented to the Kyrene staff for consideration in the form of a technical memorandum. If changes to operational modes for handling scum and foam are appropriate, Greeley and Hansen will develop a corresponding SOP and work with the Kyrene staff on its implementation.

## **Series 400 – Process Air Evaluations**

Since start-up of the new MBR facility, the Kyrene operations and maintenance staff have been challenged with optimizing the amount of process and scour air necessary to maintain a stable treatment process. In general, the amount of process air delivered remains high and is not only expensive, but is affecting the process.

Greeley and Hansen will review the basis of design for the amount of process air needed to oxidize the current and projected organic and ammonia loads, as well as that necessary for membrane scour. Included is a review of the aeration equipment currently installed in the bioreactor and its aerial distribution within the reactor. The purpose of this review is to determine what alternatives, if any, exist for the operation of the existing air delivery system so as to better balance the air delivered to the actual oxygen demand. This optimization will be conducted within the context of process parameters such as F/M ratio and SRT control.



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**Scope of Engineering Services and Fee Proposal**  
Exhibit A – Scope of Engineering Services

**Meetings**

- Optimization of Air Delivery System Alternatives Meeting (2 hours)

**Deliverables**

- Optimization of Air Delivery System Alternatives Technical Memorandum. Greeley and Hansen, in cooperation with the Kyrene staff, will develop a set of up to three alternatives for optimizing the process air delivery system and presented to the Kyrene staff in the form of a technical memorandum. This includes an SOP for the operation of the blowers and process air valves, and air release valves.

**Series 425 – Evaluation of High H<sub>2</sub>S Issues at the Bar Screen Building**

The Kyrene plant staff indicated that they are having high H<sub>2</sub>S issues at the bar screen building. Greeley and Hansen will review the basis of design for the air exchanges required based on the area classification. Design values will be compared with measured data. The comparison results will be used to develop alternatives to reduce the high H<sub>2</sub>S values to compliance levels.

**Meetings**

- H<sub>2</sub>S Issues at Bar Screen Building Meeting (2 hours)

**Deliverables**

- H<sub>2</sub>S Reduction Alternatives Technical Memorandum. Greeley and Hansen, in cooperation with the Kyrene staff, will develop a set of up to three alternatives for reducing the H<sub>2</sub>S values at the Bar Screen Building and present it to the Kyrene staff in the form of a technical memorandum.

**Series 450 – Coarse Screens Draining Issues**

The Kyrene plant staff indicated that the drain on the downstream side of the coarse screens is too small and plugs easily causing raw sewage floods in the building. Greeley and Hansen will develop an alternative to address this issue.

**Meetings**

- Coarse Screens Drain Meeting (1 hours)

**Deliverables**

Coarse Screens Drain Upsize Alternatives Technical Memorandum. Greeley and Hansen, in cooperation with the Kyrene staff, will develop an alternative to upsize the coarse screens drain and present it to the Kyrene staff in the form of a technical memorandum.



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**Scope of Engineering Services and Fee Proposal**  
Exhibit A – Scope of Engineering Services

## **Series 475 – Screens Building Area Classification**

The screen building is currently classified as Class 1 Division 1. The Kyrene plant staff indicated that this classification will need to be reviewed to include the requirements for the existing electrical components. Greeley and Hansen will review the current classification related to the use of the screens building and provide an opinion as to the appropriateness of the classification.

### **Meetings**

- Screens Building Area Classification Meeting (1 hours)

### **Deliverables**

Screens Building Area Classification Technical Memorandum. Greeley and Hansen, in cooperation with the Kyrene staff, will provide an opinion for the classification of the screens building area considering building characteristics, use and installed components.

## **Series 500 – Reimbursable Expenses**

Reimbursable expenses have been identified for this assignment as follows:

- Mail and Courier
- Reproduction
- Travel

These items are considered project expenses that can be reimbursed by the City with a paid invoice or proof of purchase. Reimbursements are to contain no markups.

City of Tempe  
Existing Process Overview at Kyrene Water Reclamation Plant  
**Scope of Engineering Services and Fee Proposal**  
~~Exhibit B~~ -- Fee Proposal

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Fee Proposal for Greeley and Hansen

**Basic Services**

Series	100 - Project Management Services	\$ 1,153
Series	200 - Process Evaluation	\$ 9,642
Series	300 - Scum Removal Evaluations	\$ 8,159
Series	400 - Process Air Evaluations	\$ 7,806
Series	425 - Evaluation of High H2S Issues at the Bar Screen Building	\$ 7,519
Series	450 - Coarse Screens Draining Issues	\$ 6,708
Series	475 - Screens Building Area Classification	\$ 8,784
Series	500 - Reimbursable Expenses	<u>\$ 4,800</u>
<b>Total Basic Services</b>		<b>\$ 54,571</b>
<b>Allowance (As requested and authorized by the City of Tempe)</b>		<b>\$ 10,000</b>

*RAB*

City of Tempe  
Existing Process Overview at Kyrene Water Reclamation Plant  
**Scope of Engineering Services and Fee Proposal**  
~~Exhibit D~~ – Fee Proposal

Hourly Rate Schedule for Greeley and Hansen

<u>Labor Category</u>	<u>Direct Labor Rate</u>	<u>Indirect Labor @173%</u>	<u>Total Direct and Indirect Labor</u>	<u>Engineering Fee @12%</u>	<u>Billable Rate</u>
Project Director	\$77.00	\$133.21	\$210.21	\$25.23	\$235.44
Project Manager	\$47.04	\$81.38	\$128.42	\$15.41	\$143.83
Process Engineer	\$65.40	\$113.14	\$178.54	\$21.42	\$199.96
Project Engineer / Architect	\$40.00	\$69.20	\$109.20	\$13.10	\$122.30
Staff Engineer / Architect/EIT	\$33.00	\$57.09	\$90.09	\$10.81	\$100.90
Technician	\$25.00	\$43.25	\$68.25	\$8.19	\$76.44
Clerical	\$21.50	\$37.20	\$58.70	\$7.04	\$65.74

*PAB*

~~Contract~~ Fee Proposal

## Fee Proposal for Greeley and Hansen

[illegible]

<u>Billable Rate</u>				<u>Expense Allowances</u>	
<u>Labor Category</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>	<u>Item</u>	<u>Amount</u>
Project Director	21.5	\$235.44	\$ 5,062	Mail and Courier	\$ 100
Project Manager	90.0	\$143.83	\$ 12,945	Reproduction	\$ 200
Senior Engineer / Architect	152.0	\$199.96	\$ 30,392	Travel	\$ 4,500
Project Engineer / Architect	8.0	\$122.30	\$ 978		\$ -
Staff Engineer / Architect	-	\$100.90	\$ -		\$ -
Technician	-	\$76.44	\$ -		\$ -
Clerical	6.0	\$65.74	\$ 394		\$ -
Totals	277.5		\$ 49,771		\$ -
					\$ -
					\$ -
				Total Other Direct Costs	\$ 4,800
				Handling (@0%)	\$ -
Total Estimated Effort	\$ 54,571 Total		\$ 49,771	Total Allowances	\$ 4,800

RB

City of Tempe

Existing Process Overview at Kyrene Water Reclamation Plant

**Scope of Engineering Services and Fee Proposal**

Exhibit B – Fee Proposal

<u>Task</u>	<u>Description</u>	<u>Project Director</u>	<u>Project Manager</u>	<u>Process Engr/Arch</u>	<u>Project Engr/Arch</u>	<u>Staff Engr/EIT</u>	<u>Technician/Drafting</u>	<u>Clerical</u>	<u>Total Hours</u>	<u>Total Dollars</u>
110	Project Management	2.0	2.0	-	-	-	-	6.0	10.0	\$ 1,153
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
Totals		2.0	2.0	-	-	-	-	6.0	10.0	\$ 1,153

<u>Billable Rate</u>				<u>Expense Allowances</u>	
<u>Labor Category</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>	<u>Item</u>	<u>Amount</u>
Project Director	2.0	\$235.44	\$ 471		\$ -
Project Manager	2.0	\$143.83	\$ 288		\$ -
Senior Engineer / Architect	-	\$199.96	\$ -		\$ -
Project Engineer / Architect	-	\$122.30	\$ -		\$ -
Staff Engineer / Architect	-	\$100.90	\$ -		\$ -
Technician / Drafting	-	\$76.44	\$ -		\$ -
Clerical	6.0	\$65.74	\$ 394		\$ -
Totals	10.0		\$ 1,153		\$ -
					\$ -
					\$ -
					\$ -
					\$ -
				Total Other Direct Costs	\$ -
				Handling (@0%)	\$ -
				Total Allowances	\$ -
Total Estimated Effort		\$ 1,153	Total		\$ 1,153

*Pub*

~~Exhibit B~~ Fee Proposal

## Process Evaluation

<u>Task</u>	<u>Description</u>	<u>Project Director</u>	<u>Project Manager</u>	<u>Process Engr/Arch</u>	<u>Project Engr/Arch</u>	<u>Staff Engr/EIT</u>	<u>Technician/Drafting</u>	<u>Clerical</u>	<u>Total Hours</u>	<u>Total Dollars</u>
210 Nitrogen Analysis		2.0	8.0	16.0	-	-	-	-	26.0	\$ 4,821
220 Mass Balance Analysis		2.0	8.0	16.0	-	-	-	-	26.0	\$ 4,821
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
Totals		4.0	16.0	32.0	-	-	-	-	52.0	\$ 9,642

Billable Rate				Expense Allowances	
Labor Category	Hours	Rate	Amount	Item	Amount
Project Director	4.0	\$235.44	\$ 942		\$ -
Project Manager	16.0	\$143.83	\$ 2,301		\$ -
Senior Engineer / Architect	32.0	\$199.96	\$ 6,399		\$ -
Project Engineer / Architect	-	\$122.30	\$ -		\$ -
Staff Engineer / Architect	-	\$100.90	\$ -		\$ -
Technician / Drafting	-	\$76.44	\$ -		\$ -
Clerical	-	\$65.74	\$ -		\$ -
Totals	52.0		\$ 9,642		\$ -
				Total Other Direct Costs	\$ -
				Handling (@0%)	\$ -
Total Estimated Effort	\$ 9,642 Total		\$ 9,642	Total Allowances	\$ -

City of Tempe

Existing Process Overview at Kyrene Water Reclamation Plant

**Scope of Engineering Services and Fee Proposal**

Exhibit B – Fee Proposal

Scum Removal Evaluations

Task	Description	Project Director	Project Manager	Process Engr/Arch	Project Engr/Arch	Staff Engr/EIT	Technician/Drafting	Clerical	Total Hours	Total Dollars
310	Scum Removal Evaluations	4.5	16.0	24.0	-	-	-	-	44.5	\$ 8,159
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
Totals		4.5	16.0	24.0	-	-	-	-	44.5	\$ 8,159

Billable Rate				Expense Allowances	
Labor Category	Hours	Rate	Amount	Item	Amount
Project Director	4.5	\$235.44	\$ 1,059		\$ -
Project Manager	16.0	\$143.83	\$ 2,301		\$ -
Senior Engineer / Architect	24.0	\$199.96	\$ 4,798		\$ -
Project Engineer / Architect	-	\$122.30	\$ -		\$ -
Staff Engineer / Architect	-	\$100.90	\$ -		\$ -
Technician / Drafting	-	\$76.44	\$ -		\$ -
Clerical	-	\$65.74	\$ -		\$ -
Totals	44.5		\$ 8,159		\$ -
					\$ -
					\$ -
					\$ -
					\$ -
				Total Other Direct Costs	\$ -
				Handling (@0%)	\$ -
				Total Allowances	\$ -
Total Estimated Effort		\$ 8,159	Total	\$ 8,159	

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~~Exhibit B~~ Fee Proposal

## Process Air Evaluations

<u>Task</u>	<u>Description</u>	<u>Project Director</u>	<u>Project Manager</u>	<u>Process Engr/Arch</u>	<u>Project Engr/Arch</u>	<u>Staff Engr/EIT</u>	<u>Technician/Drafting</u>	<u>Clerical</u>	<u>Total Hours</u>	<u>Total Dollars</u>
410	Process Air Evaluations	3.0	16.0	24.0	-	-	-	-	43.0	\$ 7,806
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
Totals		3.0	16.0	24.0	-	-	-	-	43.0	\$ 7,806

Billable Rate				Expense Allowances	
Labor Category	Hours	Rate	Amount	Item	Amount
Project Director	3.0	\$235.44	\$ 706		\$ -
Project Manager	16.0	\$143.83	\$ 2,301		\$ -
Senior Engineer / Architect	24.0	\$199.96	\$ 4,798		\$ -
Project Engineer / Architect	-	\$122.30	\$ -		\$ -
Staff Engineer / Architect	-	\$100.90	\$ -		\$ -
Technician / Drafting	-	\$76.44	\$ -		\$ -
Clerical	-	\$65.74	\$ -		\$ -
Totals	43.0		\$ 7,806		\$ -
					\$ -
					\$ -
				Total Other Direct Costs	\$ -
				Handling (@0%)	\$ -
Total Estimated Effort	\$ 7,806	Total	\$ 7,806	Total Allowances	\$ -

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City of Tempe  
Existing Process Overview at Kyrene Water Reclamation Plant  
**Scope of Engineering Services and Fee Proposal**  
~~Exhibit B~~ – Fee Proposal

Evaluation of High H2S Issues at the Bar Screen Building

<u>Task</u>	<u>Description</u>	<u>Project Director</u>	<u>Project Manager</u>	<u>Process Engr/Arch</u>	<u>Project Engr/Arch</u>	<u>Staff Engr/EIT</u>	<u>Technician/Drafting</u>	<u>Clerical</u>	<u>Total Hours</u>	<u>Total Dollars</u>
410	Evaluation of High H2S Issues at the Bar Screen	3.0	14.0	24.0	-	-	-	-	41.0	\$ 7,519
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
<b>Totals</b>		<b>3.0</b>	<b>14.0</b>	<b>24.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>41.0</b>	<b>\$ 7,519</b>

<u>Billable Rate</u>				<u>Expense Allowances</u>	
<u>Labor Category</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>	<u>Item</u>	<u>Amount</u>
Project Director	3.0	\$235.44	\$ 706		\$ -
Project Manager	14.0	\$143.83	\$ 2,014		\$ -
Senior Engineer / Architect	24.0	\$199.96	\$ 4,799		\$ -
Project Engineer / Architect	-	\$122.30	\$ -		\$ -
Staff Engineer / Architect	-	\$100.90	\$ -		\$ -
Technician / Drafting	-	\$76.44	\$ -		\$ -
Clerical	-	\$65.74	\$ -		\$ -
<b>Totals</b>	<b>41.0</b>		<b>\$ 7,519</b>		<b>\$ -</b>
					\$ -
					\$ -
				Total Other Direct Costs	\$ -
				Handling (@0%)	\$ -
<b>Total Estimated Effort</b>				<b>Total Allowances</b>	<b>\$ -</b>
	<b>\$ 7,519</b>	<b>Total</b>	<b>\$ 7,519</b>		

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City of Tempe  
Existing Process Overview at Kyrene Water Reclamation Plant  
**Scope of Engineering Services and Fee Proposal**  
Exhibit B – Fee Proposal

Coarse Screens Draining Issues

Task	Description	Project Director	Project Manager	Process Engr/Arch	Project Engr/Arch	Staff Engr/EIT	Technician/ Drafting	Clerical	Total Hours	Total Dollars
410	Coarse Screens Draining Issues	2.0	10.0	24.0	-	-	-	-	36.0	\$ 6,708
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
Totals		2.0	10.0	24.0	-	-	-	-	36.0	\$ 6,708

Billable Rate				Expense Allowances	
Labor Category	Hours	Rate	Amount	Item	Amount
Project Director	2.0	\$235.44	\$ 471		\$ -
Project Manager	10.0	\$143.83	\$ 1,438		\$ -
Senior Engineer / Architect	24.0	\$199.96	\$ 4,799		\$ -
Project Engineer / Architect	-	\$122.30	\$ -		\$ -
Staff Engineer / Architect	-	\$100.90	\$ -		\$ -
Technician / Drafting	-	\$76.44	\$ -		\$ -
Clerical	-	\$65.74	\$ -		\$ -
Totals	36.0		\$ 6,708		\$ -
					\$ -
					\$ -
				Total Other Direct Costs	\$ -
				Handling (@0%)	\$ -
				Total Allowances	\$ -
Total Estimated Effort	\$ 6,708	Total	\$ 6,708		\$ -

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~~Exhibit B~~ - Fee Proposal

### Screens Building Area Classification

<u>Task</u>	<u>Description</u>	<u>Project Director</u>	<u>Project Manager</u>	<u>Process Engr/Arch</u>	<u>Project Engr/Arch</u>	<u>Staff Engr/EIT</u>	<u>Technician/ Drafting</u>	<u>Clerical</u>	<u>Total Hours</u>	<u>Total Dollars</u>
475	Screens Building Area Classification	3.0	16.0	24.0	8.0	-	-	-	51.0	\$ 8,784
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
Totals		3.0	16.0	24.0	8.0	-	-	-	51.0	\$ 8,784

Billable Rate				Expense Allowances	
Labor Category	Hours	Rate	Amount	Item	Amount
Project Director	3.0	\$235.44	\$ 706		\$ -
Project Manager	16.0	\$143.83	\$ 2,301		\$ -
Senior Engineer / Architect	24.0	\$199.96	\$ 4,798		\$ -
Project Engineer / Architect	8.0	\$122.30	\$ 978		\$ -
Staff Engineer / Architect	-	\$100.90	\$ -		\$ -
Technician / Drafting	-	\$76.44	\$ -		\$ -
Clerical	-	\$65.74	\$ -		\$ -
Totals	51.0		\$ 8,784		\$ -
					\$ -
					\$ -
				Total Other Direct Costs	\$ -
				Handling (@0%)	\$ -
Total Estimated Effort	\$ 8,784	Total	\$ 8,784	Total Allowances	\$ -

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City of Tempe  
Existing Process Overview at Kyrene Water Reclamation Plant  
**Scope of Engineering Services and Fee Proposal**  
Exhibit B - Fee Proposal

Reimbursable Expenses

Task	Description	Project Director	Project Manager	Process Engr/Arch	Project Engr/Arch	Staff Engr/EIT	Technician/Drafting	Clerical	Total Hours	Total Dollars
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
		-	-	-	-	-	-	-	-	\$ -
Totals		-	-	-	-	-	-	-	-	\$ -

Labor Category		Billable Rate				Expense Allowances	
			Hours	Rate	Amount	Item	Amount
Project Director			-	\$235.44	\$ -	Mail and Courier	\$ 100
Project Manager			-	\$143.83	\$ -	Reproduction	\$ 200
Senior Engineer / Architect			-	\$199.96	\$ -	Travel	\$ 4,500
Project Engineer / Architect			-	\$122.30	\$ -		\$ -
Staff Engineer / Architect			-	\$100.90	\$ -		\$ -
Technician / Drafting			-	\$76.44	\$ -		\$ -
Clerical			-	\$65.74	\$ -		\$ -
	Totals		-		\$ -		\$ -
						Total Other Direct Costs	\$ 4,800
						Handling (@0%)	\$ -
Total Estimated Effort		\$ 4,800	Total		\$ -	Total Allowances	\$ 4,800

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